WHAT IS CLAIMED IS:

Sub a1

1. Visual security monitoring system for monitoring outdoor and indoor security systems of a facility comprising:

a plurality of video systems to include security cameras and video switchers and/or multiplexers,

a plurality of security devices selected from intrusion detection, access control, GPS, other security software, and/or digital video recording systems, and producing alarm signals therefrom,

a plurality of digital interfaces connected to receive alarm signals from said security devices and correlating said alarm signals with said video systems, and display monitors for sequentially displaying video images from said video switchers and/or multiplexers,

a computer connected to said digital interfaces including a pointing device,

one or more video display monitors for automatically displaying video based on alarm signal inputs from said security devices,

a computer display monitor for graphical display of alarm events from said security devices in a geographic context.

2. The visual security monitoring system defined in claim 1 wherein said computer causes three-dimensional (3D)

visual simulation of said facility to be displayed on said computer display monitor using a geometric computer model derived from imagery and/or photographs such that the said monitor displays a spatially accurate and realistic visual representation of the facility.

3. The visual security monitoring system defined in Claim 2 wherein each said video camera and each said security device is represented as a 3D geometric model or 3D sensor icon, and wherein each said 3D sensor icon represents both the physical device and its coverage area, wherein each said 3D sensor icon is rendered in said 3D visual simulation at a position in 3-space corresponding to its approximate geographic location and area of coverage.

4. The visual security monitoring system defined in Claim 3 wherein the physical status and/or alarm status of said security devices and/or cameras are displayed graphically by altering the visual properties of each corresponding 3D sensor icon in response to said alarm inputs, and wherein a plurality of visual properties may be used to represent alarm states including colors, textures, and animation of said visual properties.

5. The visual security monitoring system defined in Claim 2 transitions the 3D eye point of said photo-realistic simulation to a lookdown angle optimal for

viewing the simulation of said alarm inputs with rapid, smooth, and continuous motion that simulates flying to that location in 3-space in response to:

a user graphically selecting any of the 3D sensor icons in the said photo-realistic visual simulation,

alarm inputs from said security and/or video devices.

6. The visual security monitoring system defined in Claim 2 sends any hardware or software command to any said security device, said video systems, other hardware, and/or other software in response to:

a user graphically selecting any of the volumetric areas in the said photo-realistic visual simulation,

alarm inputs from said security and/or video devices.

7. Visual security monitoring system for monitoring outdoor security systems of a facility comprising:

a plurality of video cameras dispersed at a plurality of selected locations dispersed about the facility to be monitored and producing corresponding video signals,

a plurality of video motion detectors, one coupled to each video camera for automatically detecting moving objects in the selected locations and producing first alarm signals for each of the cameras, respectively,

a plurality of perimeter intrusion detection devices (ITD), at least one ITD at each selected location being

monitored and producing second alarm signals corresponding thereto,

a data acquisition unit connected to receive alarm signals from said video motion detectors and said ITDs and correlating said alarms with said video signals from each of said video cameras, respectively,

a video multiplexer connected to receive signals from said video cameras and a first display monitor for sequentially displaying video images from said video multiplexer,

a computer connected to said data acquisition unit,

a computer display monitor coupled to said data acquisition unit through said computer for automatically switching video cameras based on alarm inputs from said infrared perimeter detection devices and said video motion detection devices.

8. The visual security monitoring system defined in Claim 7 wherein said computer causes photo-realistic 3D visualization of said facility to be displayed on said display monitor.

9. The visual security monitoring system defined in Claim 8 wherein the selected area covered by each said video camera is highlighted in said photo-realistic 3D visualization on said display monitor.